



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/645,800

08/22/2003

Jin Hyung Ryu

HI-0174

9284

34610

-7590

07/11/2007

KED & ASSOCIATES, LLP

P.O. Box 221200

Chantilly, VA 20153-1200

EXAMINER

DINH, DUC Q

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

07/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/645,800

Applicant(s)

RYU ET AL.

Examiner

DUC Q. DINH

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed April 26, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the amended specification filed on April 17, 2007, pages 2-4, in which all occurrences “general and conventional” amended as “related art”.

Applicant is required to cancel the new matter in the reply to this Office Action.

Requirements for Information

2. Applicant is requested for requiring factual information under 35 CFR 1.105 to disqualify the Related Art as prior for 102(a) rejection.

The examiner considers the AAPA taught in pages 1-8 as prior art as discloses in the original Disclosures for the Art Rejection in view of the 112 Rejection above as following.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-8 and 13-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant Admitted Prior Art, hereafter, AAPA, pages 1-8.

In reference to claim 1 the AAPA discloses in Figs. 3-4 a conventional (page 8, lines 5-6) driving apparatus of a plasma display panel (PDP), comprising a multi-chip module (32) in which at least one control chip having a control circuit (ASIC 26) for controlling the PDP, and at least one memory (RAM 33) are mounted on a single package (32), wherein the multi-chip module is mounted on a printed circuit board (PCB) of a control board (13) [Paragraph 0023] (the original specification discloses control board 13 is a conventional art at paragraph [0026]).

In reference to claim 2, the AAPA discloses the package is a ball grid type [0022].

In reference to claim 3, the AAPA discloses the multiple chip module transmits a control signal to each driving unit via the PCB (Figs. 3-4; [0021-0022]).

In reference to claim 4, the AAPA discloses a driving apparatus of a plasma display panel, comprising:

a control board (13) provided with a multi-chip module in which at least one control chip having a control circuit (26) for controlling the PDP, and at least one memory (33) are mounted on a single package (32) the original specification discloses control board 13 is a conventional art at paragraph [0026]);

a plurality of driving units (18A-18B of Figs. 3-4) for generating and applying a driving signal corresponding to a control signal generated from the control board (13); and a PDP (Fig. 4) for displaying an image by a plasma discharge according to the driving signal applied from each of the plurality of driving units [0020-0025].

In reference to claim 5, the AAPA discloses wherein the package is a ball grid type.

In reference to claim 6, the AAPA discloses the control board is provided with a printed circuit board (PCB) on which at least one package is mounted [0024].

In reference to claim 7, the AAPA discloses the control chip is an ASIC type having a control circuit (Figs, 3-4).

In reference to claim 8, Figs 3-4 of the AAPA shows the multi-chip module is mounted on the PCB ([0024].

In reference to claim 13, the AAPA discloses a plasma display panel (PDP) driving apparatus comprising:

a control board having a circuit board (13) and a multi-chip module on the circuit board, the multi-chip module including a plurality of control chips (26) and a plurality of memories (33) on a package, the control chip including a control circuit to control a PDP (the original specification discloses control board 13 is a conventional art at paragraph [0026]).

In reference to claim 14, refer to the rejection as applied to claim 2.

In reference to claim 15, refer to the rejection as applied to claim 3.

In reference to claim 16 the AAPA discloses a plurality of driving units to (18 at [0018]) generate and apply driving signals corresponding to control signals received from the control board (13).

In reference to claim 17, the AAPA discloses display (22) to display an image by a plasma discharge based on the driving signals applied from each of the plurality of driving units.

In reference to claim 18, the AAPA discloses wherein the control chip comprises an ASIC type (see claim 7).

In reference to claims 19 and 21, the AAPA discloses a plurality of control chips (26) mounted on the single package.

In reference to claims 20 and 22, the AAPA discloses a plurality of memories (33) mounted on the single package.

Response to Arguments

5. Applicant's arguments filed on April 26, pages 9-11, have been fully considered but they are not persuasive. With respect to claim 1, the AAPA discloses a conventional control board 13 having control chip module 32 (original disclosures at [0025- 0026]) in which at least one memory 26 are mounted on the board 12 as a single package (26); therefore, the AAPA teaches a multiple chip module (32) in which the at least control chip (26) and at least one memory (33) are mounted on a single package (the multiple chip module 32) as in claim 4 and the controller 13 comprising multiple chip module including a plurality of control chips 26 and a plurality of memories 33 on a single package 32 as claim 13 which is disclosed in [0025-0027] of the conventional art. The rejection for the application, is therefore, maintained.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH
Examiner
Art Unit 2629



DQD
July 5, 2007